

#### JOHN B. FENN AWARD FOR DISTINGUISHED CONTRIBUTION IN MASS SPECTROMETRY

The ASMS Award for Distinguished Contribution in Mass Spectrometry honors the memory of John B. Fenn who shared the 2002 Nobel Prize for the development of electrospray ionization. The award is conferred at the ASMS Annual Conference with the presentation of a \$10,000 cash award, a recognition plaque, and the award lecture.





**Carol V. Robinson** is the recipient of the 2023 ASMS John B. Fenn Award for a Distinguished Contribution in Mass Spectrometry for the development of mass spectrometry methods for the analysis and characterization of membrane proteins. Dr. Robinson's pioneering contributions have improved our fundamental understanding of membrane protein complex structure and the role of lipid binding in membrane protein function. Her work has enabled new knowledge into disease mechanisms and has had tremendous impact in drug discovery. Specific accomplishments include: (1) pioneering development of methods to enable gas phase analysis of membrane protein complexes; (2) the application of ion mobility MS and collision-induced unfolding methods to investigate lipid-membrane protein binding; (3) the application of high-resolution MS to resolve the complexity of lipid-protein binding events; and (4) the innovative development of methods for native analysis of membrane protein complexes and lipid binding.

Her collective achievements have been amplified by her dedication to the dissemination of detailed protocols and troubleshooting advice to the research community –

ensuring that others had the necessary information to implement the methods. This outreach has resulted in an active cohort of MS researchers across the globe working on the mass spectrometry of membrane protein complexes.

In 2013 Carol was elevated to the title of "Dame Commander of the Order of the British Empire (DBE)" for services to science and Industry. Professor Dame Carol Robinson is University Chair and Professor of Chemistry, University of Oxford.



#### **BIEMANN MEDAL**

The Biemann Medal is awarded to recognize significant achievement in basic or applied mass spectrometry in the early stages of an academic career. The Medal is conferred at the ASMS Annual Conference with the presentation of a \$5,000 cash award and the award lecture.



**Brandon Ruotolo** is the recipient of the 2023 ASMS Biemann Medal for his significant contributions in the development and application of novel high performance mass spectrometry technologies for protein and protein complex structure elucidation. Examples of his innovative scientific contributions include: (1) leadership in the development of ion mobility MS (IM-MS) for structural characterization of biopolymers; (2) refinement of collision induced unfolding (CIU) methods that enable determination of the number of autonomously folded domains within proteins and characterization of stability reflective of changes in both local and global protein structure; (3) the use of CIU to probe the relative stability of protein-ligand interactions; (4) the development of chemical cross-linkers to stabilize protein structure in the absence of bulk solvent; (5) integration of IM-MS and other structural MS methods as a high-throughput approach for structural proteomics; and (6) application of IM-MS as a screening tool for therapeutic drug discovery. Dr. Ruotolo has built an impressive research program that is addressing application of high impact to the biology and medical communities.

Dr. Ruotolo is Professor of Chemistry, University of Michigan.



## AL YERGEY MS SCIENTIST AWARDS

The AI Yergey MS Scientist Awards are sponsored by ASMS to recognize dedication and significant contributions to mass spectrometrybased science by "unsung heroes." The awards are named in memory of AI Yergey a well-respected scientist who was known as a dedicated mentor. Each Award is conferred at the ASMS Annual Conference with \$1,000 cash award and a recognition plaque.



**Eduard Denisov** (Thermo Fisher Scientific) is one of key people whose hard and creative work over the last two decades was crucial for making Orbitrap mass spectrometry the leading technique in high resolution mass spectrometry. He took leading part in experimental development of all major elements of the Orbitrap technology. Over all these years he remained a reliable, modest and at the same time a very passionate enthusiast of Orbitrap technology, who really cares that every user of this technology is getting the best results.



Jodie Johnson (University of Florida) is so extremely valuable to MSREC, the University of Florida, and the larger MS community. No matter where you are in your MS career, from novice to 20 years of experience, one can learn invaluable knowledge from Dr. Johnson. He is a dedicated mentor and his knowledge is expansive in areas of chromatography and mass spectrometry. He loves to share his knowledge and loves to engage in research discussions.



Amina Woods (NIDA IRP, NIH) has made significant contributions to MS-based science and her dedication to the field of mass spectrometry is amply featured by her record of research, service and teaching. Amina has willingly offered her knowledge through many venues. Biological mass spectrometry became an integral component of her research activities in the early 1990s when she became affiliated with the late Bob Cotter using plasma desorption MS to characterize biological molecules. From then on, mass spectrometry has been at the heart of much of her research portfolio and her community participation in many mass spectrometry organizations including ASMS.

#### **RON HITES AWARD FOR OUTSTANDING RESEARCH PUBLICATION IN JASMS**

The Ron Hites Award recognizes an outstanding publication of original research published in *JASMS*. The award is named to honor Professor Ron Hites of Indiana University, who led the creation of *JASMS* in 1988 while president of ASMS. The Award includes \$2,000 and plaque for principal author and certificates for co-authors.



Joshua Sharp (University of Mississippi) is recipient of the 2023 Hites Award along with co-authors Emily E. Chea, Sandeep K. Misra, Ron Orlando, Marla Popov, Robert W. Egan, David Holman, and Scot R. Weinberger for their paper "Flash Oxidation (FOX) System: A Novel Laser-Free Fast Photochemical Oxidation Protein Footprinting Platform", 2021, 32, 1601-1609.



### **R**ESEARCH **A**WARDS

Research Awards promote the research of academic scientists within the first four years of joining the tenure track or research faculty of a North American University at the time the award is conferred. The awards, in the amount of \$35,000 for the recipient's proposed research are fully funded by Bruker, Thermo Fisher Scientific, and Waters Corporation and are made to the institution of each recipient.





**Kelly Marie Hines** University of Georgia



Thermo Fisher Jesse Meyer Cedars-Sinai

Funded by

Medical Center



Funded by

Waters THE SCIENCE OF WHAT'S POSSIBLE."

**Stacy Malaker** Yale University

### **Research At Primarily Undergraduate Institution (PUI) Award**





This award promotes academic research in mass spectrometry by faculty members and their students at primarily undergraduate institutions (PUIs). The Award of \$20,000 for the recipient's proposed research is fully funded by Agilent and is made to recipient's institution.



St. Johns University

Erica Jacobs

### **POSTDOCTORAL CAREER DEVELOPMENT AWARDS**

Postdoctoral Career Development Awards in the amount of \$5,000 promote professional career development of postdoctoral fellows in the field of mass spectrometry.



Emma Guiberson Stanford University



Haiyan Lu University of Wisconsin-Madison



Melanie Odenkirk University of Arizona



Suttipong Suttapitugsakul Beth Israel Deaconess Medical Center



Yixuan Xie Washington University School of Medicine



### **GRADUATE STUDENT TRAVEL AWARDS**

Elizabeth Bayne University of Wisconsin-Madison

**Danielle Caefer** University of Connecticut

**Hsin-Hsiang Chung** National Taiwan University

**Steven DeFiglia** University of Michigan

Sarah Dowling Indiana University-Purdue University Indianapolis

**Kimberly Fabijanczuk** *Purdue University* 

Ashley Frankenfield George Washington University **Viraj Gandhi** Indiana University-Purdue University Indianapolis

**Yanting Guo** University of Oklahoma

Amanda Khoo University of Toronto David Koomen

Vanderbilt University

**Nicolas Morato** Purdue University

Leena Pade University of Maryland-College Park

Austin Salome University of Wisconsin-Madison Xue Sun Peking University Madison Turner University of Guelph

**Benqian Wei** University of California, Los Angeles

**David Williamson** University of Utah

**Tingyuan Yang** Texas A&M University

**Kejun Yin** Georgia Institute of Technology

#### **UNDERGRADUATE STUDENT TRAVEL AWARDS**

**Megan Bindra** Saint Mary's College of California

**Emily Boyette** South Florida State College **Olivia Dioli** North Carolina State University

**Celine Ertekin** University of California, Santa Cruz Dinuri Fernando University of North Carolina, Chapel Hill Yu Tin Lin Univeristy of Florida Lawren Paris University of Oregon Aliyah Remoroza University of Maryland Baltimore County **Philenroza Thavrin** Oregon State University **Oliver Wu** University of Oklahoma

